

# TRADE, TECHNOLOGY, AND INCOME INEQUALITY

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- New wave of interest in inequality corrects important malpractice by trade economists.

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- iPhone/Foxconn?

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  - Trade in tasks: extensive margin vs. intensive.
- Trade with high-wage countries vs. low-wage.

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# Within-group.

- E.g., Bertrand (2004): Invisible handshake.
- E.g., Helpman, Itskhoki, Muendler and Redding, (2017): Matching with heterogenous firms.

# Trade in tasks vs. trade in goods.

- A lot of the income inequality effects come from *offshoring* (don't say “outsourcing”).
- E.g., ship parts to Mexico for assembly.
- Harder to measure than goods trade.

# Intensive vs. extensive margin.

- Expanding existing offshoring vs. starting from zero.
- E.g., Boehm, Flaaen, and Pandalai-Nayar (2015).

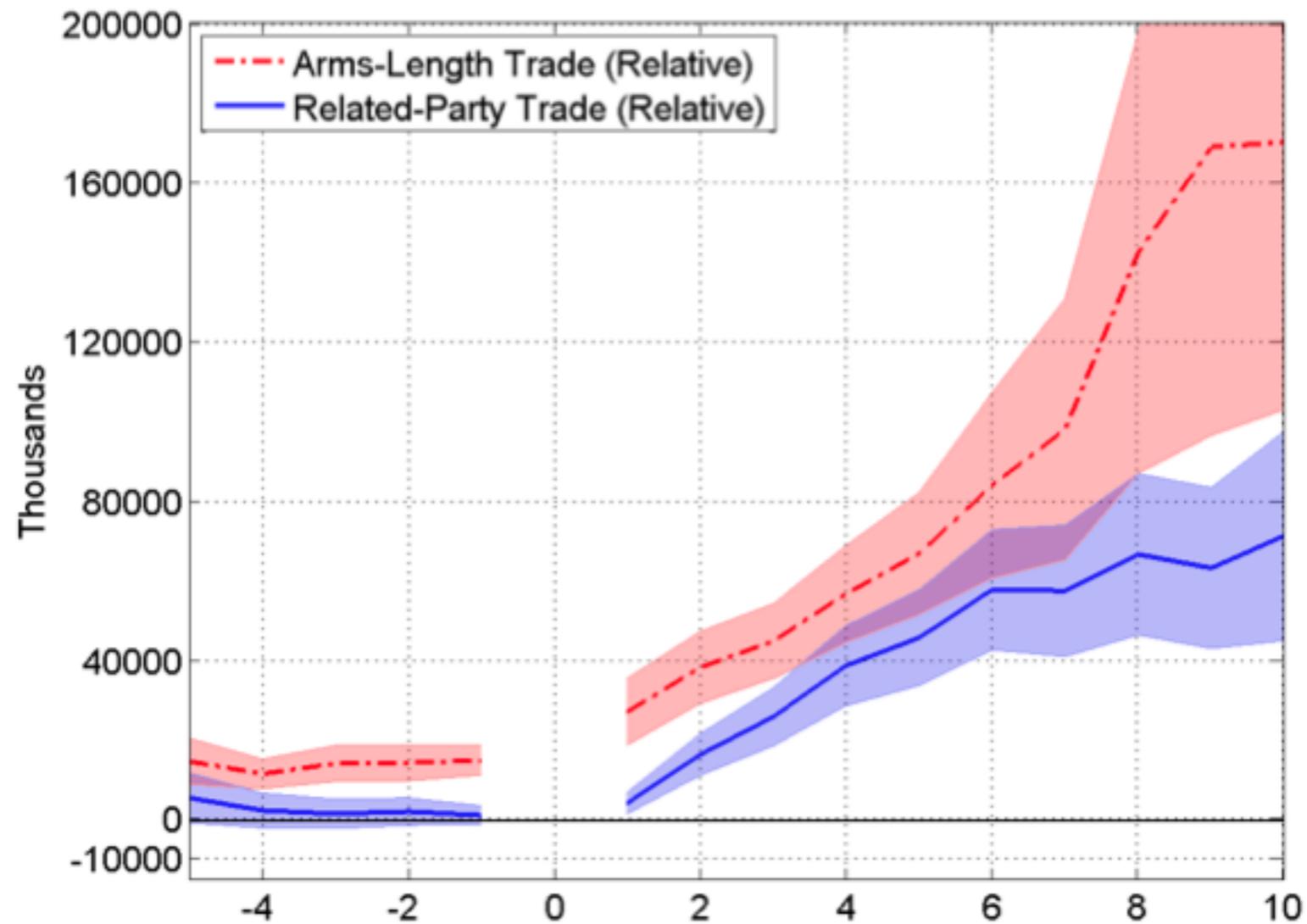
Figure 2: Employment Growth Differential of Multinational Transitions



Source: LFTTD-DCA-UBP as explained in text.

This figure plots the pre and post annual deviations in the employment growth rate of establishments that transition into part of a multinational firm in year ( $t = 0$ ), relative to a control group based on interacted effects of firm age, establishment size, and industry (in year  $t = -1$ ). The control group consists of establishments that are not part of a multinational firm in year  $t = 0$ . See equation 2. The shaded area corresponds to a 95 percent confidence interval.

Figure 3: Importing Differentials of Multinational Transitions



Source: LFTTD-DCA-UBP as explained in text.

This figure reports the related-party and arms-length intermediate input imports of the parent firm of an establishment that transitions into part of a multinational firm in year ( $t = 0$ ), relative to a control group based on interacted effects of firm age, establishment size, and industry (in year  $t = -1$ ). See equation 2, modified to reflect firm-level imports as dependent variables. The shaded area corresponds to a 95 percent confidence interval.

# Low-wage vs. high-wage country partner.

- Harrison and McMillan (2011): Substitutes vs. complements.

# Three examples: I.

- Ebenstein, Harrison, McMillan, and Phillips (2014).
- Current Population Surveys (CPS) 1984-2002.
- *Blue-collar* workers in *routine* occupations in industries that offshore to *low-wage* countries.

# Three examples: II.

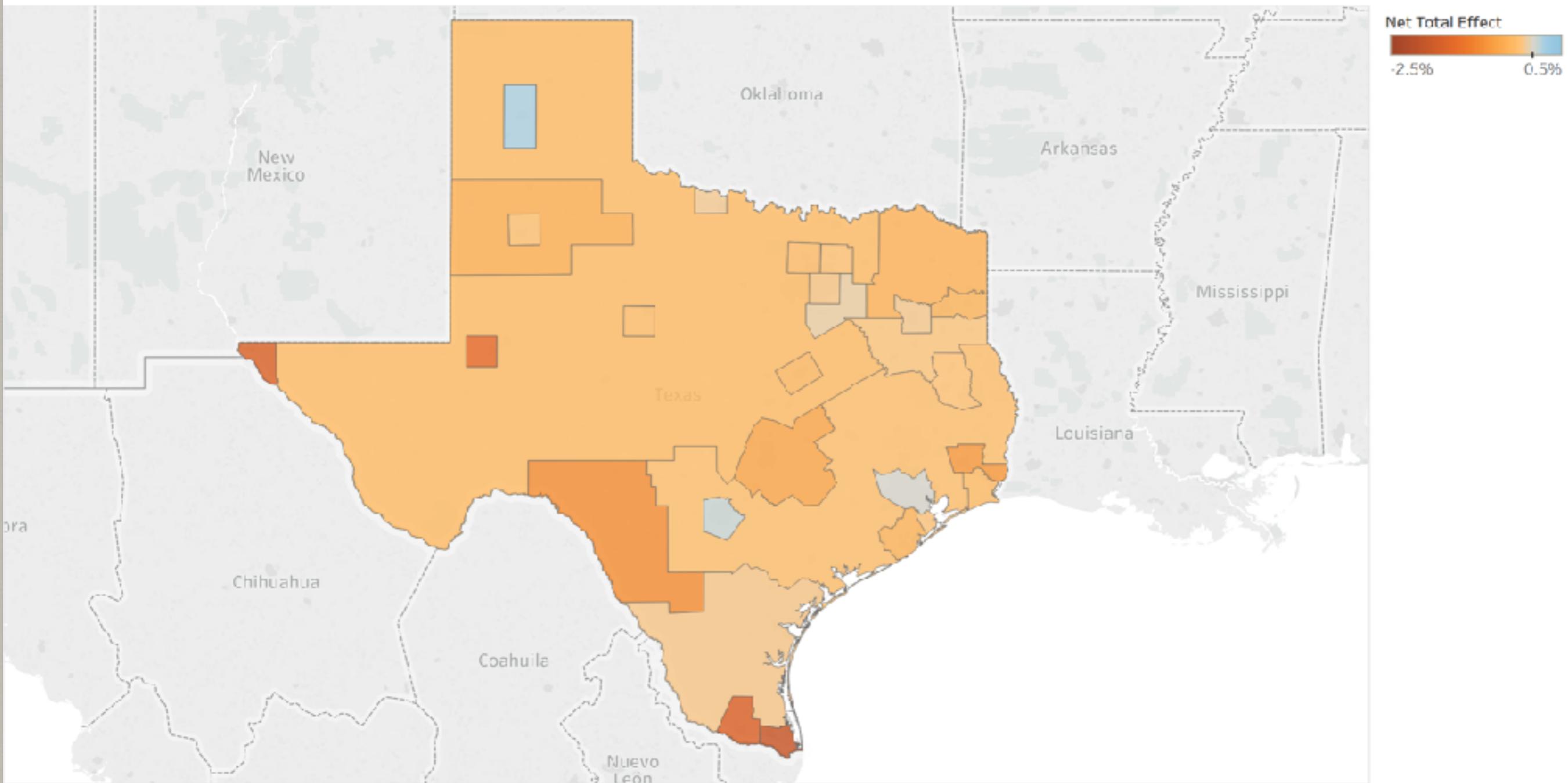
- Autor, Dorn and Hanson (2013).
- US decennial census and ACS, 1990-2007.
- Workers in *local labor markets with high shares of import-competing industries*; geographic inequality.

# Three examples: III.

- Hakobyan and McLaren (2016).
- US decennial census, 1990-2000.

# High-school dropouts.

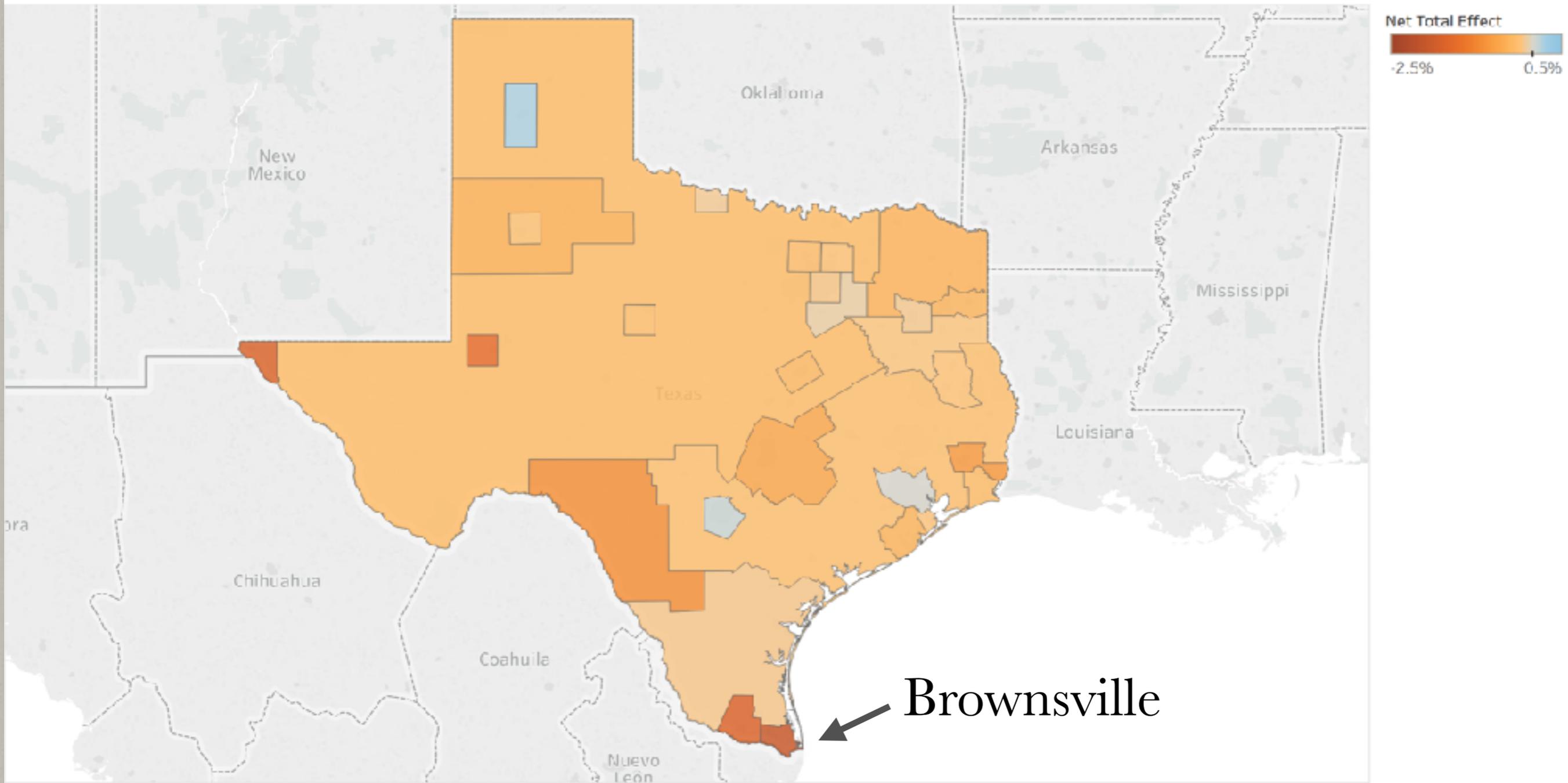
Net Total Effect (LHS)





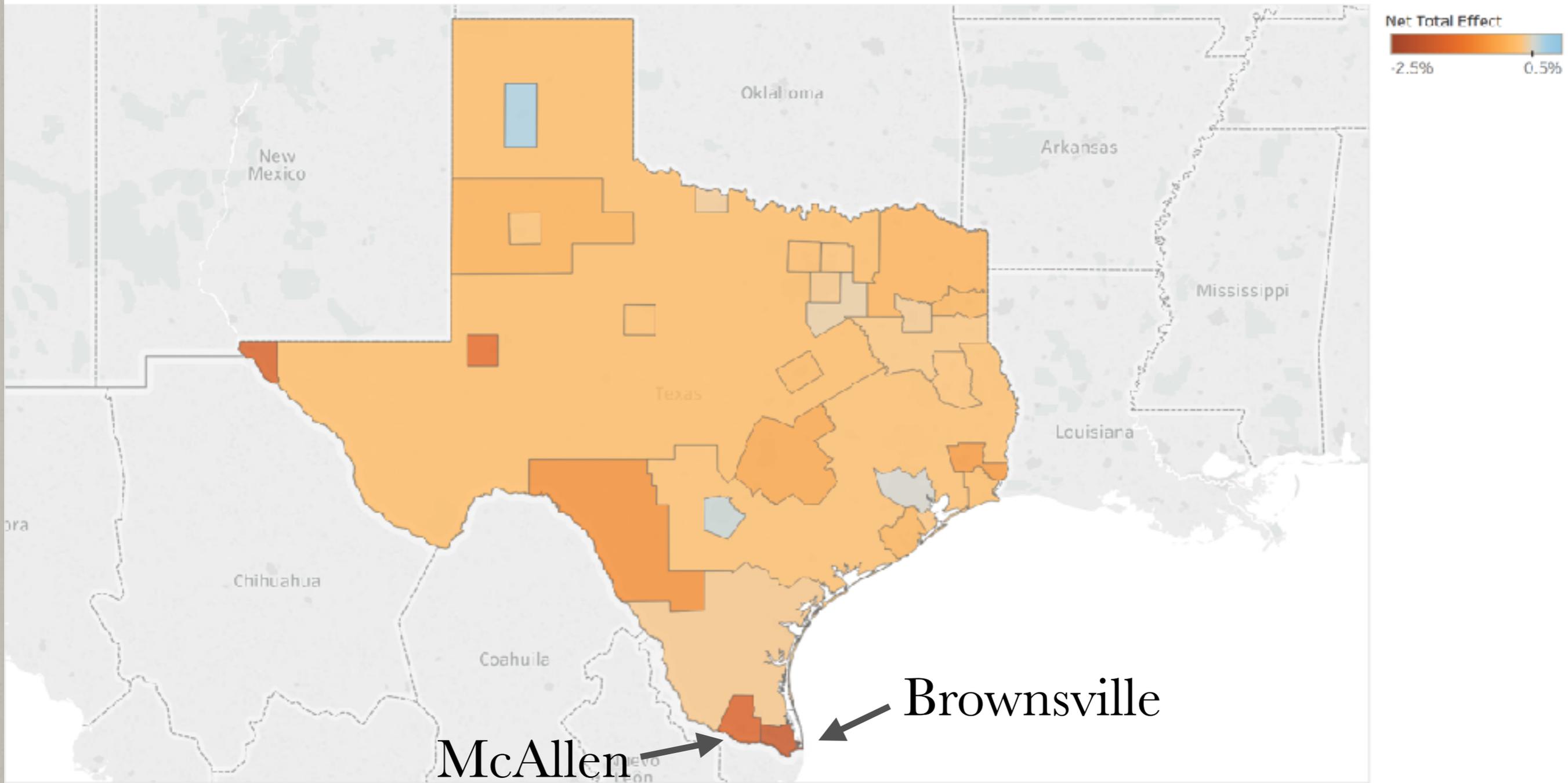
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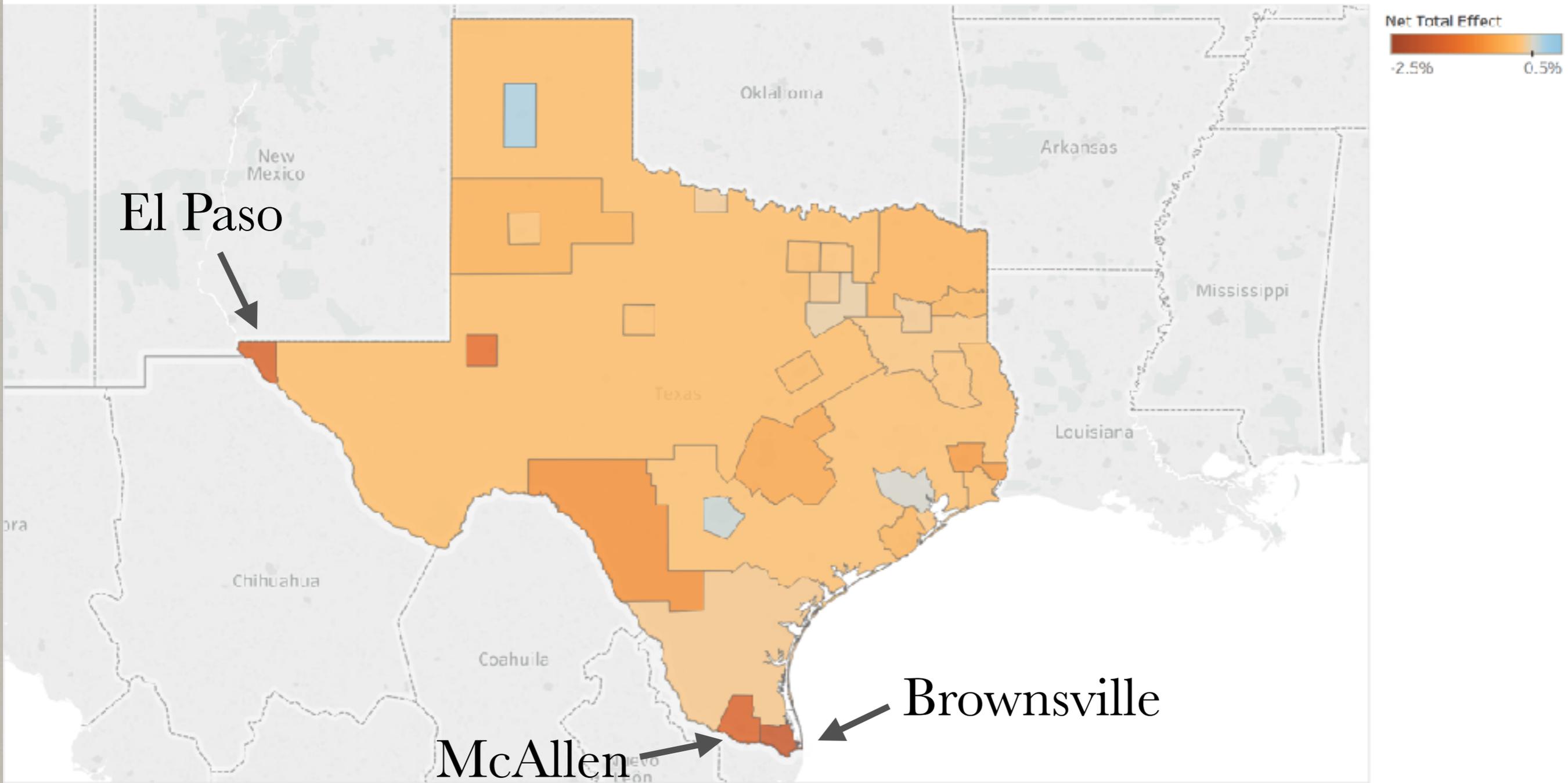
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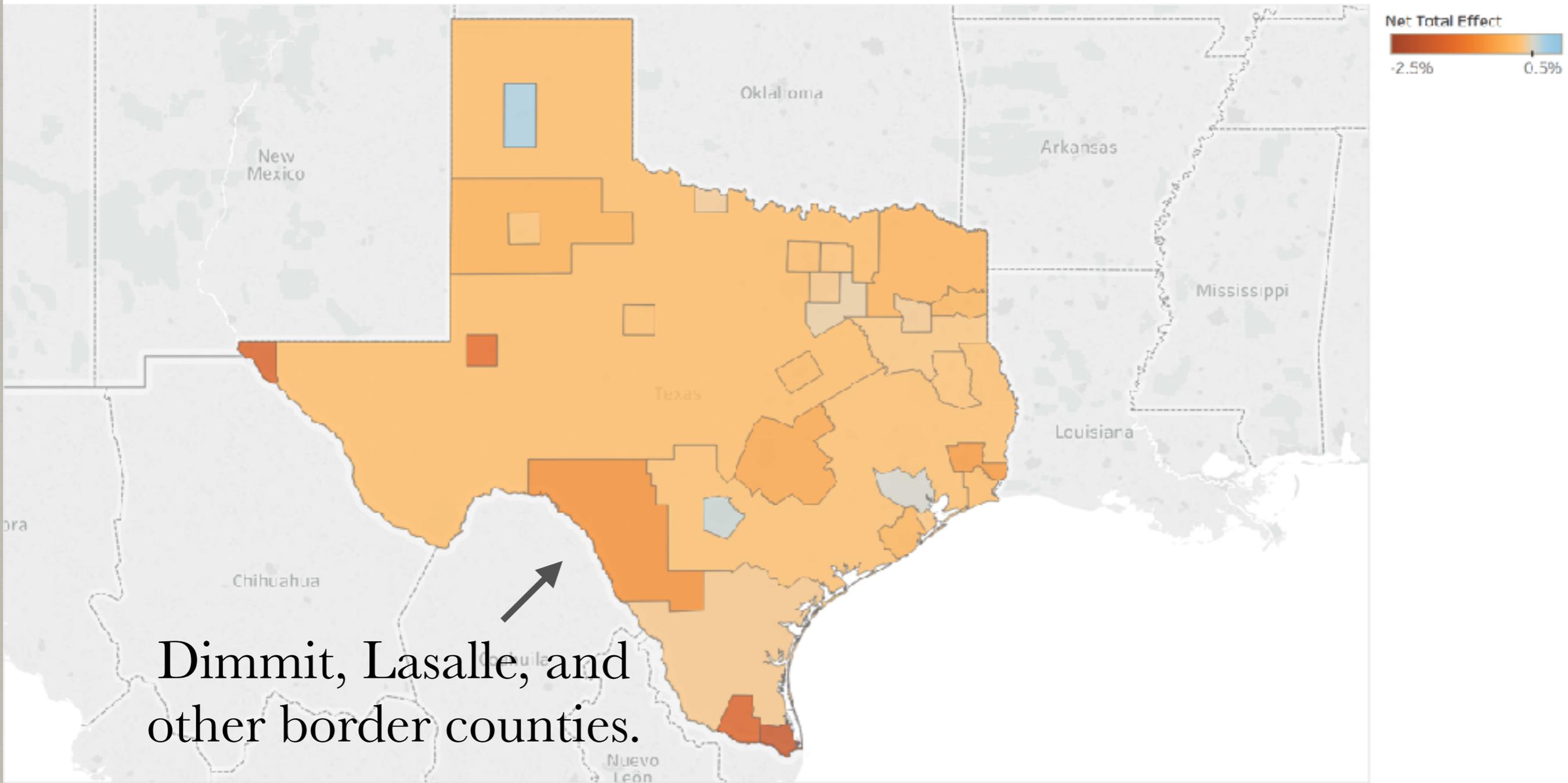
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